

INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2005/004731

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 F01N3/025 F01N3/035 F01N9/00		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) IPC 7 F01N		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, PAJ		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 05, 12 May 2003 (2003-05-12) & JP 2003 020930 A (TOYOTA MOTOR CORP), 24 January 2003 (2003-01-24) cited in the application abstract	1-10
A	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 03, 5 May 2003 (2003-05-05) & JP 2002 332822 A (TOYOTA MOTOR CORP), 22 November 2002 (2002-11-22) cited in the application abstract	1-10
-/--		
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the International filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family		
Date of the actual completion of the international search 9 June 2005		Date of mailing of the international search report 17/06/2005
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Ikas, G

INTERNATIONAL SEARCH REPORT

International Application No

PCT/JP2005/004731

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2004/013579 A1 (SCHALLER JOHANNES) 22 January 2004 (2004-01-22) paragraph '0026! figures 1,3	1-10
A	EP 1 229 223 A (NISSAN MOTOR CO., LTD) 7 August 2002 (2002-08-07) paragraphs '0044! - '0071!	1-10

INTERNATIONAL SEARCH REPORT

information on patent family members

International Application No

PCT/JP2005/004731

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 2003020930	A	24-01-2003	NONE	
JP 2002332822	A	22-11-2002	NONE	
US 2004013579	A1	22-01-2004	DE 10024254 A1	06-12-2001
			WO 0188346 A1	22-11-2001
			EP 1287238 A1	05-03-2003
			JP 2003533626 T	11-11-2003
EP 1229223	A	07-08-2002	JP 2002303123 A	18-10-2002
			DE 60200383 D1	27-05-2004
			DE 60200383 T2	26-08-2004
			EP 1229223 A1	07-08-2002